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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

APPLICANT: R. BRUCE DeMENT, ET AL.  
TITLE: Nozzle for Use in Rotational Casting Apparatus  
SERIAL NO.: 10/646,343  
FILING DATE: August 22, 2003  
GROUP: ART UNIT 1722  
EXAMINER:

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To: The Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**PETITION TO MAKE SPECIAL**

Sir:

Applicants hereby petition that the above-identified application be made special under the provisions for accelerated examination as set forth in the Manual of Patent Examining Procedure, Section 708.02-VIII.

A pre-examination search was made by professional searcher, and developed references previously submitted as part of an Information Disclosure Statements.

The field of the search included: Class 239, Subclasses 589, as well as the searching the USPTO computer database.

None of the patents cited in the above-mentioned Information Disclosure Statements, whether taken singly or in combination, anticipates or makes obvious the claims of the present application as set forth in the pending claims, since none of the prior art cited in the Information Disclosure Statements discloses an nozzle having a

dispensing passageway configured like that set forth in independent claims 1, 16, 18 and 20 of the instant application.

U.S. Patent No. 873,301 discloses a nozzle terminating in a slot-like opening whose cross-sections along the length of its dispensing passageway do not change shape.

U.S. Patent No. 2,945,739 discloses an orifice for melt-spinning which may have different shapes. This patent does not show a nozzle terminating in a slot-like opening whose the cross-sections along the length of its dispensing passageway change shape.

U.S. Patent No. 3,834,629 discloses a nozzle for funnel-shaped orifice for manufacturing metal powder. This patent does not show a nozzle terminating in a slot-like opening whose cross-sections along the length of its dispensing passageway change shape as in the present invention.

U.S. Patent No. 4,141,507 discloses nozzle having a circular inlet and which changes to rectangular. This patent does not disclose the changing cross-sectional shapes of the nozzle of the present invention as claimed, nor does it show a passageway that changes shape in which the differently-shaped cross sections have the same area.

U.S. Patent No. 4,151,955 discloses a nozzle designed for turbulent flow and not laminar flow as in the present invention.

U.S. Patent No. 4,300,723 a paint-spray nozzle whose cross-sections along the length of its dispensing passageway do not change shape as in the instant invention.

U.S. Patent No. 4,466,854 does not disclose a nozzle whose cross-sections along the length of its dispensing passageway change shape.

U.S. Patent No. 4,494,698 discloses a spray nozzle whose cross-sections along the length of its dispensing passageway do not change shape.

U.S. Patent No. 4,565,515 discloses a spray nozzle whose cross-sections along the length of its dispensing passageway do not change shape.

U.S. Patent No. 4,689,003 does not disclose a nozzle whose cross-sections along the length of its dispensing passageway change shape.

U.S. Patent No. 4,721,251 discloses a mixing chamber and does not disclose a nozzle whose cross-sections along the length of its dispensing passageway change shape.

U.S. Patent No. 4,741,286 discloses a spray nozzle whose cross-sections along the length of its dispensing passageway do not change shape.

U.S. Patent No. 4,758,397 does not disclose a nozzle whose cross-sections along the length of its dispensing passageway change shape.

U.S. Patent No. 4,801,955 discloses an ink-jet nozzle whose cross-sections along the length of its dispensing passageway do not change shape as in the present invention.

U.S. Patent No. 4,852,773 does not disclose a nozzle whose cross-sections along the length of its dispensing passageway change shape.

U.S. Patent No. 4,982,896 does not disclose a nozzle whose cross-sections along the length of its dispensing passageway change shape.

U.S. Patent No. 5,028,006 discloses a spray nozzle whose cross-sections along the length of its dispensing passageway do not change shape.

U.S. Patent No. 5,031,426 discloses a water nozzle whose cross-sections along the length of its dispensing passageway do not change shape.

U.S. Patent No. 5,470,515 does not disclose a spray nozzle whose cross-sections along the length of its dispensing passageway change shape.

U.S. Patent No.5,490,554 discloses a nozzle whose cross-sections along the length of its dispensing passageway do not change shape.

U.S. Patent No. 5,587,117 does not disclose a spray nozzle whose cross-sections along the length of its dispensing passageway change shape.

U.S. Patent No. 5,601,881 does not disclose a nozzle whose cross-sections along the length of its dispensing passageway change shape.

U.S. Patent No.5,658,386 does not disclose a nozzle whose cross-sections along the length of its dispensing passageway change shape.

U.S. Patent No.5,704,982 does not disclose a nozzle whose cross-sections along the length of its dispensing passageway change shape.

U.S. Patent No.5,895,689 discloses a polyurethane composition for coating cylindrical parts and has no bearing on the nozzle of the present invention.

U.S. Patent No.5,895,806 discloses a polyurethane composition for coating cylindrical parts and has no bearing on the nozzle of the present invention.

U.S. Patent No.5,902,540 does not disclose a nozzle whose cross-sections along the length of its dispensing passageway change shape.

U.S. Patent No.6,394,369 5,902,540 does not disclose a nozzle whose cross-sections along the length of its dispensing passageway change shape.

U.S. Patent No.6,464,154 discloses a casting nozzle whose cross-sections along the length of its dispensing passageway do change shape; however, the shapes are different from that of the present invention, do not provide laminar flow, and are not of equal cross-sectional areas as in the present invention.

U.S. Published Patent Application No. US 2002/0130200 discloses a nozzle whose cross-sections along the length of its dispensing passageway do not change shape as in the instant invention.

U.S. Published Patent Application No. US 2001/0038045 discloses a nozzle like that disclosed in above-discussed U.S. Patent No. 6,464,154, and, therefore, does not disclose the nozzle of the present invention for the same reasons given hereinabove.

The non-patent literature cited in the previously-filed Information Disclosure Statement has been duly described and discussed in the "Background" section of the instant application, and does not show nor disclose the nozzle of the present invention having a passageway that changes its cross-sectional geometric shape.

It is, therefore, believed that the invention of the instant application is patentably distinct over the references, whether taken singly or in combination.

If a restriction is required, Applicants shall make an election, without traverse, by telephone, as required.

It is believed that the Applicants have met the requirements as called for by the accelerated prosecution procedure.

An interview with the examiner will be arranged if such would expeditiously bring the instant application to issue.

It is, therefore, requested that this Petition for Accelerated Examination and designation of this case as special be granted.

The petition in the amount of \$130 is also submitted herewith.

Respectfully submitted,

By: 

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